Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

DEVAL L. PATRICK
Governor

MAEVE VALLELY BARTLETT
Secretary

DAVID W. CASH
Commissioner

August 5, 2014

Mr. John J. Walker
DSM Coating Resins, Inc.
730 Main Street
Wilmington, MA 01887

RE: ***WILMINGTON***
Transmittal No.: X259547
Application No.: *NE-14-007*
Class: *SM25*
FMF No.: *417394*
AIR QUALITY PLAN APPROVAL

Dear Mr. Walker:

The Massachusetts Department of Environmental Protection ("MassDEP"), Bureau of Waste Prevention, has reviewed your Limited Plan Application ("Application") listed above. This Application concerns the proposed expansion and installation of equipment upgrades at your existing facility located at 730 Main Street, Wilmington, Massachusetts.

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 "Air Pollution Control," regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-J, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP's review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner / operator ("Permittee") must comply in order for the Facility to be operated in compliance with this Plan Approval.

1. DESCRIPTION OF FACILITY AND APPLICATION

DSM Coatings Resin, Inc. ("Permittee") operates an existing manufacturing facility at 730 Main Street, Wilmington, MA ("Facility") which produces urethane coatings on two existing process lines. The facility is operating under a Limited Plan Application (LPA) Approval, Application No. MBR-90-COM-199, which was issued by MassDEP to ICI Resins US (predecessor to DSM Coatings Resin, Inc.) on May 20, 1993. This Final Approval, Application No. NE-14-007, will supersede, in its entirety, the previous LPA Approval that was issued to ICI Resins US.

The existing manufacturing Facility consists of one (1) solvent-based urethane coating process line, three (3) water-based urethane coating process lines, a pilot plant, four (4) product drum pack out stations, and a tank farm containing a total of twenty-five (25) underground and above ground raw material storage tanks.

Urethane manufacturing operations (including solvent-based and water-based manufacturing) and the pilot plant operations are controlled by an existing catalytic oxidizer (PCD-CATOX). Two of the raw material storage tanks, the ethyl acetate storage tank (EU-AGT-11) and the acetone waste tank (EU-UST-2) will be controlled via PCD-CATOX after passing through the secondary condenser (PCD-SC).

Fifteen (15) product storage tanks and lines from three (3) product drum pack out stations, all of which serve the water-based urethane manufacturing operations, are uncontrolled since the emissions of volatile organic compounds (VOC), total hazardous air pollutants (HAPS), and hydrocarbons (HYC) are negligible. All other operations including the remaining twenty-three (23) raw material storage tanks in the tank farm and the single solvent-based product drum pack station are not controlled.

The Application proposes, among other things, to add acetone-based product manufacturing capability. The proposed plant expansion will result in the installation of ten (10) new process tanks, the modification of two (2) existing process tanks, as well as the removal of five (5) tanks. The description of the existing and proposed process equipment can be found in Table 1 below (with the exception of the five tanks scheduled to be removed).

A new primary condenser (PCD-PC) and a new secondary condenser (PCD-SC) will be installed and utilized, in series, to control the new acetone-based product manufacturing operations and to lower the inlet loading rate to the PCD-CATOX. PCD-PC will have a minimum heat transfer surface area of 750 square feet (ft^2) while PCD-SC will have a minimum heat transfer surface area of 40 ft^2. At this point in time, the Permittee does not plan to take credit for the removal of acetone and/or VOC via the two condensers. Instead, the removal efficiency of acetone and VOC from the acetone-based product manufacturing operations will only be based on the existing catalytic oxidizer described below.

An existing American Model No. IE-9-AH centrifugal fan will draw 1,100 standard cubic feet per minute (scfm) of process gas to the existing McGill Americas catalytic oxidizer (PCD-CATOX). The cross sectional area of the combustion chamber is 13.1 square feet with a length of 11.33 feet. PCD-CATOX is equipped with four Torvex precious metal catalyst modules. Each module contains 16 cubic feet of precious metal coated, ceramic honeycomb catalyst. The minimum residence time is 3.3 seconds at a contaminant stream inlet flow rate of 2,719 actual cubic feet per minute (acfm) at 850 degrees Fahrenheit (^{o}F).

PCD-CATOX has an existing McGill Americas burner, which is used to maintain the inlet temperature of the process gas stream entering the catalyst beds at a minimum temperature of 850^{o}F. This burner is capable of firing a maximum 5,500 cubic feet per hour of natural gas, its sole fuel of use. PCD-CATOX provides a minimum destruction efficiency of 96 percent, by weight, for volatile organic compounds (VOC), total hazardous air pollutants (total HAPs), and hydrocarbon (HYC) emissions. Since all of these process emissions are captured and hard piped to PCD-CATOX, the capture efficiency is 100 percent.

The exhaust gases from PCD-CATOX are vented to atmosphere via Stack No. 1 which is 30 feet above ground level with an inside exit diameter of 2.3 feet that provides a maximum exit velocity of 10 feet per second at 950^{o}F. PCD-CATOX also possesses a bypass stack which is used to vent the combustion air during the “heat up” and “cooling down” of the catalytic oxidizer. All uncontrolled emissions discharged through the bypass stack during emergency conditions will be monitored and recorded.

DSM Coating Resins, Inc. is subject to the Federal National Emissions Standards for Hazardous Air Pollutants (NESHAPs) for Chemical Manufacturing Area Sources under 40 CFR Part 63 Subpart VVVVVV. Among other things, Subpart VVVVVV requires any area source that installed a federally enforceable control device on an affected chemical manufacturing process unit (CMPU) to obtain a Title V operating permit if the control device on an affected CMPU is necessary to maintain the facility’s emissions at area source levels. DSM installed its catalytic oxidizer long ago, not to maintain the facility’s emissions at area source levels, but instead to reduce odors when their prior operations used a chemical that had a potential to create odors. DSM no longer uses that chemical, but continues to use the catalytic oxidizer, recognizing that it does reduce emissions. The potential uncontrolled HAP emissions from DSM’s controlled Subpart VVVVVV-affected CMPUs plus potential HAP emissions from the balance of the facility are less than 25 tons per year (total HAP) and less than 10 tons per year (any individual HAP). Therefore, the facility is not subject to Title V under Subpart VVVVVV and is not required to apply for an Operating Permit pursuant to 310 CMR 7 Appendix C.

2. EMISSION UNIT (EU) IDENTIFICATION

Each Emission Unit (EU) identified in Table 1 is subject to and regulated by this Plan Approval:

Table 1

EU#	Description and Maximum Capacity	Pollution Control Device (PCD)
	Existing Water-based Manufacturing Operations	PCD-CATOX via South Header
EU-VF-01	VF-01 (PT-1)reactor (2,550 gals)	
EU-VR-10	VR-10 (DT-1) reactor (5,700 gals)	
EU-VO33	VO33 Hydrazine weigh tank (220 gals)	
	New Water-based Manufacturing Operations	
EU-VF-02	VF-02 feed tank (2,000 gals)	
EU-VR-01	VR-01 pre-polymer tank (2,500 gals)	
EU-VR-02	VR-02 pre-polymer tank (2,500 gals)	
EU-VI-30	VI-30 catalyst prep tank (215 gals)	
EU-VI-31	VI-31 catalyst prep tank (215 gals)	
EU-VO-34	VO-34 hydrazine weigh tank 225 gals)	
	New Acetone-based Manufacturing Operations	PCD-PC and PCD-SC (in series), then PCD-CATOX via South Header
EU-VR-20	VR-20 dispersion tank (4,200 gals)	
EU-VS-VR20-8	VS-VR20-8 primary condenser receiver (200 gals)	
EU-VS-VR20-9	VS-VR20-9 primary condenser receiver (200 gals)	
EU-VS-HX80-1	VS-HX80-1 secondary condenser receiver (100 gals)	
	New Acetone-based Manufacturing Operations	PCD-SC, then PCD-CATOX via South Header
EU-UST-2	UST-2 acetone waste receiver (8,000 gals)	
	Existing Ethyl Acetate Tank	
EU-AGT-11	AGT-11 Ethyl acetate flush/cleaning tank (10,000 gals)	

Table 1		
EU#	**Description and Maximum Capacity**	**Pollution Control Device (PCD)**
	Existing Solvent-based Manufacturing Operations	PCD-CATOX via North Header
EU-VF-BT2	VR-BT2 (1,900 gals)	
EU-VR-BT7	VR-BT7 (3,600 gals)	
EU-VR-RF	VR-RF (5,000 gals)	
EU-R-D	R-D (3,000 gals)	
EU-CT3	CT3 (1,200 gals)	
EU-CT4	CT4 (1,200 gals)	
EU-CT5	CT5 (2,000 gals)	
EU-CT6	CT6 (1,310 gals)	
EU-BT6	BT6 (2,960 gals)	
	Existing Pilot Plant Operations	
EU-FT3	FT-3 feed tank(30 gals)	
EU-R2	R2 reactor (30 gals)	
EU-R1	R1 reactor (100 gals)	
EU-FT6	FT6 feed tank (30 gals)	
EU-FT7	FT7 feed tank (60 gals)	
EU-R8	R8 reactor (60 gals)	
	Existing Raw Material Storage Tanks	None
EU2	Twenty-three (23) Above ground and underground raw material storage tanks (5,000 – 10,000 gals per tank)	
	Existing Drum Pack Stations	
EU3	Three (3) water-based urethane and one (1) solvent based urethane drum pack out stations	

Table 1 Key:
EU = Emission Unit
# = Number
gals = gallons
prep = preparation
PCD-CATOX = catalytic oxidizer
PCD-PC= primary condenser
PCD-SC = secondary condenser

Table 1 Notes:
New Vessel IDs are used in EU#s in Table 1: Existing Vessel IDs are in parenthesis

3. APPLICABLE REQUIREMENTS

A. OPERATIONAL, PRODUCTION AND EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2, below:

Table 2

EU#	Operational / Production Limit	Air Contaminant	Emission Limit Before Controls	Emission Limit After Controls
Controlled Emission Units: EU-VF-01 EU-VR-10 EU-VO33 EU-R-D EU-CT3 EU-CT4 EU-CT5 EU-CT6 EU-BT6 EU-VF-02 EU-VR-01 EU-VR-02 EU-VI-30 EU-VI-31 EU-VO-34 EU-VR-20 EU-VS-VR20-8 EU-VS-VR20-9 EU-VS-HX80-1 EU-UST-2 EU-AGT-11 EU-VF-BT2 EU-VR-BT7 EU-VR-RF EU-FT3 EU-R2 EU-R1 EU-FT6 EU-FT7 EU-R8	Monitor production such that per-batch emissions are tracked and monthly and twelve month rolling determinations are timely made to ensure that each month the pre-controlled Total HAPs monthly emission rate is less than or equal to 1.25 tons and that for each consecutive 12 month rolling period the pre-controlled 12-month Total HAPs emission rate is less than or equal to 8.30 tons Capture efficiency shall be 100% since the vents are hard piped directly to the PCDs	VOC	NA	$\leq$ 0.5 TPM $\leq$ 2.5 TPY

Table 2

EU#	Operational / Production Limit	Air Contaminant	Emission Limit Before Controls	Emission Limit After Controls
Controlled Emission Units: EU-VF-01 EU-VR-10 EU-VO33 EU-R-D EU-CT3 EU-CT4 EU-CT5 EU-CT6 EU-BT6 EU-VF-02 EU-VR-01 EU-VR-02 EU-VI-30 EU-VI-31 EU-VO-34 EU-VR-20 EU-VS-VR20-8 EU-VS-VR20-9 EU-VS-HX80-1 EU-UST-2 EU-AGT-11 EU-VF-BT2 EU-VR-BT7 EU-VR-RF EU-FT3 EU-R2 EU-R1 EU-FT6 EU-FT7 EU-R8	Monitor production such that per-batch emissions are tracked and monthly and twelve month rolling determinations are timely made to ensure that each month the pre-controlled Total HAPs monthly emission rate is less than or equal to 1.25 tons and that for each consecutive 12 month rolling period the pre-controlled 12-month Total HAPs emission rate is less than or equal to 8.30 tons Capture efficiency shall be 100% since the vents are hard piped directly to the PCDs	Total HAPs	$\leq$ 1.25 TPM $\leq$ 8.30 TPY	$\leq$ 0.05 TPM $\leq$ 0.33 TPY
		HYC (including Acetone)	NA	$\leq$ 0.7 TPM $\leq$ 1.5 TPY

Table 2				
EU#	**Operational / Production Limit**	**Air Contaminant**	**Emission Limit Before Controls**	**Emission Limit After Controls**
Uncontrolled Emission Units: EU2 EU3 Other Insignificant Sources	N/A	VOC	NA	≤ 0.5 TPM ≤ 4.0 TPY
		Total HAPs		≤ 0.1 TPM ≤ 1.2 TPY
		HYC (including Acetone)		≤ 0.5 TPM ≤ 2.0 TPY
PCD-CATOX	Minimum set point temperature for inlet process stream to catalyst beds will be 850 degrees Fahrenheit 100% capture efficiency	VOC, Total HAPS, HYC (including Acetone)		Minimum destruction efficiency of 96% by weight
Facility-wide	N/A	VOC		≤ 1.0 TPM ≤ 6.5 TPY
		Total HAPs[1]		≤ 0.15 TPM ≤ 1.55 TPY
		HYC (including Acetone)		≤ 1.2 TPM ≤ 3.5 TPY

Table 2 Key:
EU# = Emission Unit Number
VOC = Volatile Organic Compounds
Total HAPs = Total Hazardous Air Pollutants
HYC = hydrocarbons
TPM = tons per month
TPY = tons per any consecutive 12-month period
N/A = Not Applicable
≤ = less than or equal to
% = percent

Table 2 Notes:
[1] – Facility-wide Total HAPs emission limit includes 0.2 tons per 12-month rolling period from all the combustion sources at the facility.

B. COMPLIANCE DEMONSTRATION

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5 below:

Table 3

Source	Monitoring and Testing Requirements
PCD-CATOX	1. Monitor material usage (including VOC, HAPs, and HYC content of all materials used) on a monthly basis such that records can be maintained of the emission unit's emissions of total HAPs to determine compliance status with the emission limits contained in Table 2 above.
	2. Monitor operations so that if any upset occurs with these control devices, the Permittee shall discontinue operation of all associated emission units until the control device in question is repaired and operating properly, as soon as it is safe to do so.
	3. Monitor all instances of emergency venting including the date, time, and approximate amount of VOC, total HAPs, and HYC emissions that were vented.
	4. Monitor all maintenance related activities.
	5. Conduct an initial compliance test for VOC, total HAPs, and HYC by no later than September 1, 2015. All compliance testing shall be conducted in accordance with the test methods and procedures set forth in 40 CFR 60, Appendix A, or as approved by MassDEP and/or USEPA. All compliance testing shall be witnessed by MassDEP personnel at a mutually agreeable date and time.
	6. Subsequent compliance testing shall be completed on PCD-CATOX every two (2) years, or as determined by MassDEP, after the initial compliance test identified in Table 3, Paragraph 4 above. The compliance testing procedures must follow USEPA and MassDEP methods and guidelines.
	7. For compliance testing purposes, the air pollution control systems and their associated air handling systems shall be constructed so as to accommodate the emissions testing requirements as stipulated in 40 CFR Part 60, Appendix A. The two (2) inlet and two (2) outlet sampling ports should ideally be located at two duct diameters upstream and eight duct diameters downstream of any flow disturbance. The corresponding sampling ports should be 90 degrees apart from each other.
	8. Continuously monitor the inlet temperature to the catalyst beds as well as the resultant outlet temperature from the catalyst beds.
Facility-wide	9. Monitor material usage (including VOC, HAPs, and HYC content of all materials used) on a monthly basis such that records can be maintained of the Facility's emissions of VOC, HYC, single HAP, and total HAPs to determine compliance status with the emission limits contained in Table 2 above.
	10. If and when MassDEP requires, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and Regulation 310 CMR 7.13.
	11. Monitor Facility operations so that deviations from Plan Approval requirements can be reported to MassDEP.

Table 3 Key:
VOC = Volatile Organic Compounds
total HAPs = total Hazardous Air Pollutants
HYC = hydrocarbons
MassDEP = Massachusetts Department of Environmental Protection
USEPA = United States Environmental Protection Agency

Table 4	
Source	**Record Keeping Requirements**
PCD-CATOX	1. Record material usage (including VOC, HAPs, and HYC content of all materials used) on a monthly basis such that records can be maintained of the emission unit's emissions of total HAPs to determine compliance status with the emission limits contained in Table 2 above.
	2. Record all upset conditions which occur with these pollution control devices. Said records shall include but shall not be limited to a description of the reason(s) for and the duration of downtime of the pollution control device and all steps that were taken to prevent said occurrence from recurring in the future.
	3. Record all instances of emergency venting including the date, time, and approximate amount of VOC, HAPs, and HYC emissions that were vented.
	4. Record all maintenance related activities.
	5. Maintain records of the actual inlet and outlet temperatures around the catalyst beds in degrees Fahrenheit. Temperature monitoring shall include the date and any necessary description of operational changes that may occur. These temperatures shall be recorded with temperature monitoring and recording equipment using a digital readout and stored on a computerized hard drive, flash card, disc, or other media. Permittee shall have on-site temperature data back up to the flash card, disc, or other backup data capture media. These records shall be maintained on-site, and shall be made available to MassDEP personnel upon request.
Facility-wide	6. Maintain adequate records on-site to demonstrate compliance with all operational, production, and emission limits contained in Table 2 above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve month period (current month plus prior eleven months). These records shall be compiled no later than the 15th day following each month. An electronic version of the MassDEP approved record keeping form, in Microsoft Excel format, can be downloaded at http://www.mass.gov/eea/agencies/massdep/air/approvals/limited-emissions-record-keeping-and-reporting.html.
	7. Maintain records of all monitoring and emissions testing as required by Table 3.
	8. Maintain a copy of this Plan Approval, underlying Application and the most up-to-date SOMPs for the EUs approved herein on-site.
	9. Maintain a record of routine maintenance activities performed on the approved EUs, PCDs, and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.
	10. Maintain a record of all malfunctions affecting air contaminant emission rates of the approved EUs, PCDs, and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.
	11. Maintain records required by this Plan Approval on-site for a minimum of five (5) years.
	12. Make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.

Table 4 Key:
EUs = emission units
PCDs = pollution control devices
SOMPs = Standard Operating and Maintenance Procedures
MassDEP = Massachusetts Department of Environmental Protection
USEPA = United States Environmental Protection Agency

Table 5	
Source	**Reporting Requirements**
PCD-CATOX	1. Submit a compliance test protocol for each compliance test to MassDEP's Northeast Regional Office (NERO) for review and approval at least forty-five (45) days prior to the scheduled commencement of said testing.
	2. Submit the emission test results report to NERO for review within forty-five (45) days of the completion of the required compliance testing.
	3. In the event of any PCD-CATOX malfunction which results in any excess uncontrolled emissions, notify MassDEP by fax or telephone within one business day and subsequently in writing within seven days of said occurrence. This written notification shall describe the reason(s) for and the extent of down time of the PCD(s) and all steps that have been or will be taken to prevent similar malfunctions from occurring in the future.
Facility-wide	4. Submit to MassDEP all information required by this Plan Approval over the signature of a "Responsible Official" as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).
	5. Notify the Northeast Regional Office of MassDEP, BWP Permit Chief by email at nero.air@state.ma.us or fax 978-694-3499 as soon as possible, but no later than three (3) business days after discovery of any exceedance(s) of Table 2 requirement(s). A written report shall be submitted to the BWP Permit Chief within three (3) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).
	6. All notifications and reporting required and not specified by this Approval shall be made to: Department of Environmental Protection/Bureau of Waste Prevention 205B Lowell Street Wilmington, Massachusetts 01887 ATTN: BWP Permit Chief Phone: 978-694-3200 4.Fax: 978-694-3499

Table 5 Key:
PCD = Pollution Control Device
CMR = Code of Massachusetts Regulations
MassDEP = Massachusetts Department of Environmental Protection
BWP = Bureau of Waste Prevention

4. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to, and shall comply with, the following special terms and conditions:

A. The Permittee shall comply with the Special Terms and Conditions as contained in Table 6 below:

Table 6

Source	Special Terms and Conditions
Facility-wide	1. This Plan Approval, NE-14-007, supersedes the Final Approval, MBR-90-COM-199, issued to ICI Resins US on May 20, 1993, in its entirety, with the exception that all plan application materials submitted as part of Approval MBR-90-COM-199 become part of Plan Approval No. NE-14-007. In addition, to the extent that the Permittee operates the five (5) tanks, which are scheduled for removal, the Permittee shall continue to capture and control emissions from these five (5) tanks.
	2. Follow the Standard Operating and Maintenance Procedures (SOMPs) for the subject emission units and pollution control devices so as to maintain their efficient operation and minimize emissions of VOC, HYC, and total HAPs.
	3. Notify NERO, in writing, within fourteen (14) days of commencement of operation of a newly installed piece of equipment found in Table 1 above.
	4. All cleaning rags used in conjunction with cleaning solutions shall be placed in tightly covered containers when not in use, and shall be collected for proper recycling or disposal.
	5. All VOC, HYC, and HAPs containing materials shall be transported and stored in tightly covered containers. Any emissions associated with surface preparation and /or cleanup solutions shall be included in the monthly and 12 month rolling emissions calculations to determine the Permittee's compliance status with emission limits contained in Table 2 above.
	6. This Facility is subject to the Federal National Emissions Standards for Hazardous Air Pollutants (NESHAPs) for Chemical Manufacturing Area Sources under 40 CFR Part 63 Subpart VVVVVV. Since MassDEP has not accepted delegation for Subpart VVVVVV, you are advised to consult with the United States Environmental Protection Agency (USEPA) for additional information. There may be additional notification, record keeping and reporting requirements. Their address is US EPA Region 1, 5 Post Office Square – Suite 100, Boston, MA 02109-3912.
PCD-CATOX	7. The minimum inlet temperature to the catalyst beds shall be 850 degrees Fahrenheit, or such other temperature as may be established pursuant to satisfactory compliance testing results as determined by MassDEP, is achieved prior to ducting of VOC laden air to PCD-CATOX, or introduction of raw material to any reactor or tank which PCD-CATOX is meant to control. This minimum temperature shall be maintained at all times (in one-minute averages) while any associated emission unit(s) is/(are) producing VOC laden air that can't be recirculated. Temperature monitoring shall include date and time and any necessary description of operational changes that may occur.
	8. PCD-CATOX shall provide a minimum control efficiency of 96.0 weight percent for VOC. The associated air handling system(s) shall provide a 100 percent capture efficiency.
	9. A copy of the Standard Operating and Maintenance Procedure (SOMP) for PCD-CATOX shall be located at or nearby the system's control panel.

Table 6	
Source	**Special Terms and Conditions**
PCD-CATOX	10. The start-up specifications and maintenance procedures for PCD-CATOX shall be established and incorporated into its SOMP. The SOMP shall address the spare parts inventory and back-up equipment systems for the PCD-CATOX to prevent or reduce any downtime PCD-CATOX. In addition, a copy of any subsequent revisions made to the SOMP must be submitted to this office within fifteen (15) days of the documented modification(s).
	11. Prior to the commencement of operation of any emission unit requiring control by PCD-CATOX, DSM production personnel shall ensure that PCD-CATOX achieves and maintains a minimum catalyst inlet temperature of 850^{o}F (or such other temperature as may be established pursuant to satisfactory compliance testing results as determined by MassDEP). An alarm will indicate if PCD-CATOX has not reached the required minimum catalyst inlet temperature or if the subject temperature drops below the required minimum temperature.
	12. Test the catalyst activity of PCD-CATOX every twelve months and during operational upsets when catalyst activity may have been affected. Maintain all records pertaining to catalyst activity for a minimum of five (5) years.
	13. If a PCD-CATOX upset occurs and lasts for more than five (5) minutes which prevents the Permittee from operating the catalytic oxidizer properly (i.e. greater than 96 weight percent VOC destruction efficiency and 100 percent VOC capture efficiency), then the Permittee shall cancel all future batch operations that would vent to PCD-CATOX until the problem is corrected.

B. The Permittee shall install and use an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including but not limited to rain protection devices known as “shanty caps” and “egg beaters”. The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7 below, for the Emission Units that are regulated by this Plan Approval:

Table 7				
Source	**Stack Height Above Ground**	**Stack Inside Exit Dimensions**	**Minimum Stack Gas Exit Velocity**	**Stack Gas Exit Temperature Range**
PCD-CATOX	30 feet	27.6 inch diameter	10 feet per second	750 ^{o}F – 950 ^{o}F
Emergency Bypass	34 feet	12 inch diameter	21 feet per second	70 ^{o}F – 200 ^{o}F

Table 7 Key:
^{o}F = Degrees Fahrenheit

5. GENERAL CONDITIONS

The Permittee is subject to, and shall comply with, the following general conditions:

A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).

B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.

C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.

D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and/or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.

E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.

F. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.

G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.

H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.

I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.

J. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain "Fail-Safe Provisions," which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

7. APPEAL PROCESS

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval. Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars ($100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Should you have any questions concerning this Plan Approval, please contact Mr. Mun Wong by telephone at 978-694-3286, or in writing at the letterhead address.

Sincerely,

Mun S. Wong
Environmental Engineer

Susan Ruch
Deputy Regional Director
Bureau of Waste Prevention

cc: Board of Health, 121 Glen Road, Wilmington, MA 01887
Fire Headquarters, 32 Church Street, Wilmington, MA 01887
MassDEP/Boston - Yi Tian
MassDEP/NERO – Marc Altobelli, M. Persky
Pollution Prevention Consulting, P.O. Box 626, Scarborough, ME 04070 ATTN: Ms. Sandra Wyman